Aero Design Ltd.

Work Order Control Sheet

Work Order#: 2015-124 **Date Opened:** 26-Nov-15 **Title:** Fabrication

Aircraft OEM: Bell **Aircraft Model:** 212 **Product Type:** Cargo Basket **Product Model:** Mega **Quantity:** 1 body / 1 lid

Work Order Contents

	Initial or N/A
Work Order/Build Sheets (Procedures Provided)	N/A
Additional Work Sheets (Standard Practice)	N/A
Drawings (See List Below)	JC
Parts Distribution Sheet	JC
Sub Component Tags	N/A
Completed Certification (Original)	N/A
Time Sheet (R&D)	N/A
Notes	N/A

Build Sheet Contents

	Initial or N/A
Tasks Initialled	N/A
Dual Inspections Initialled	N/A

Drawing List

Drawing #	Rev #	Description	Initial or N/A
100611	0	Body	JC
100612	0	Lid	JC
100616	0	Filler Sheet	JC
100620	0	Hoop	JC
100621	0	End Hoop	JC
100622	0	Att Hoop	JC
100623	0	Lid End Hoop	JC
100624	0	Lid Hoop	JC

Traveller

Initial or N/A

Component Completion

	As Instructed
Quantity Complete on This Work Order	1 / 1
Quantity Incomplete on This Work Order	N/A
Further Processing Required Before Release	N/A
Release to Stock as Components	N/A

Certification

	Initial or N/A
Form One Completed	N/A
Serviceable (Green) Tag Completed	N/A
In Process (Yellow) Tag Completed	N/A
Unserviceable (Red) Tag Completed	N/A
Parts Placed in Stores for Distribution	N/A

Additional Documentation

	Initial or N/A
Documentation of a minor change	N/A
Non-Conformance Report Required	N/A
Service Difficulty Report Required	N/A

Billing

	Initial or N/A
Local (Aero Design)	JC
Research and Development	N/A
Third Party	N/A

Note:

Build sheets specific to this model have not been produced at this time.
Fabrication IAW drawings following general basket and lid fabrication instructions.

Work performed by:	Print: J. Clarke	Sign:	SCA: AD02	Date: 08-Dec-15
ICC / Dual Inspection preformed by:	Print: J. Rekve	Sign:	SCA: AD01	Date: 08-Dec-15
Work Order closed by:	Print: J. Clarke	Sign:	SCA: AD02	Date: 24-Dec-15

Aero Design

Parts Distribution Sheet

Description: _____ WO# 2015-124

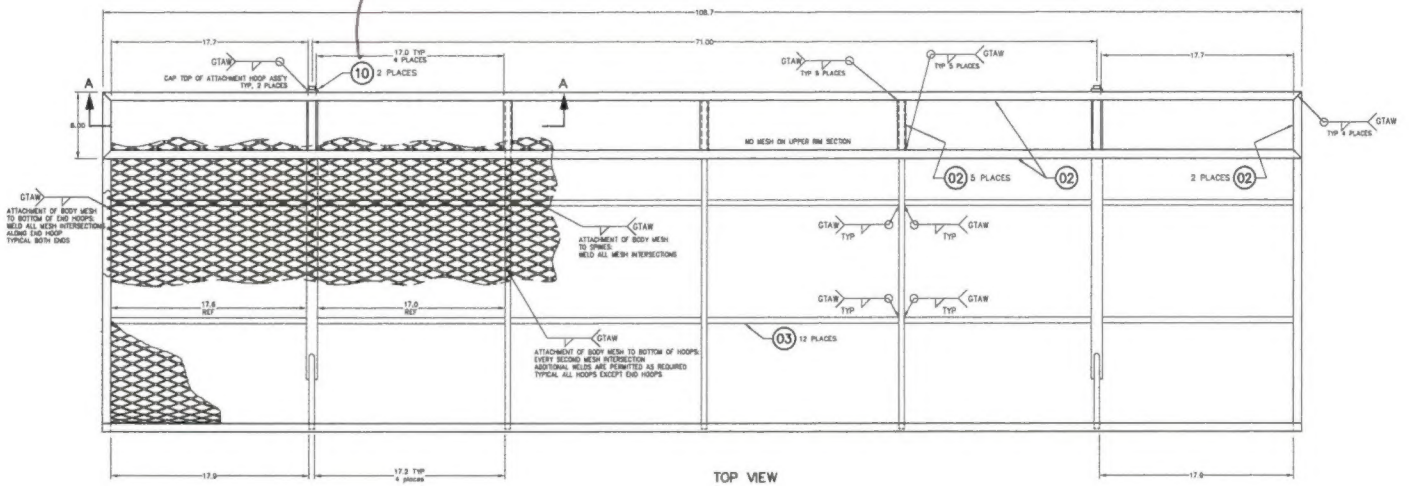
From PO or WO #	Quantity	Description	Part Number	For WO #
~~14099~~		~~3/4 x 0.035 4130~~		
~~14099~~		~~1/2 x 0.035 4130~~		
		~~1.0 x 0.065 4130~~		
		~~Ø 3/16 x 0.058 4130~~		
		SEE DWGS		

Approved Manufacturing Facility 73-04 Form 20.F.06 Rev. Original 27 May 2013

ER70S-2 TIG ROD 14033
ER308L TIG ROD 4028

REV	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE		

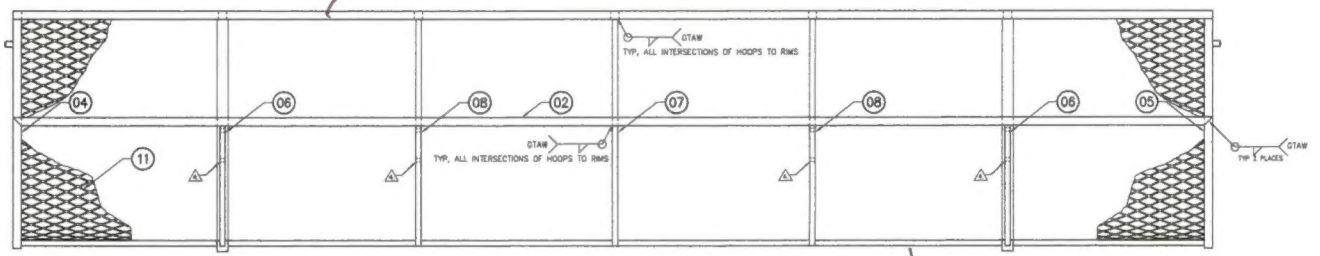
2019



TOP VIEW

NOTES:
1. REMOVE ALL BURRS AND BREAK SHARP EDGES
2. PRIOR TO WELDING, DRILL ø30 (0.129) VENT HOLES IN ASSEMBLY FOR VENTING OF WELD GASES. WHEN ASSEMBLY IS COMPLETE, FILL ALL EXPOSED VENT HOLES WITH ROSETTE WELD.
3. WELDING OF 4130 STEEL TO BE COMPLETED BY GTAW METHOD TO AMS 2685C.
   4130 AND 1018 STEEL: WELDING ROD SHALL CONFORM TO ER70S-2 OR EQUIVALENT.
   STAINLESS AND 4130 STEEL: WELDING ROD SHALL CONFORM TO ER308L OR EQUIVALENT.
4. ⚠ INSTALL ITEM 12 (BASKET HANDLE PROVISIONS ASSEMBLY) IN ACCORDANCE WITH AERO DESIGN LTD. DRAWING 84282 IN LOCATIONS SHOWN BEFORE WELDING HOOPS TO RIM.
5. FINISH: THOROUGHLY CLEAN AND POWDER COAT BASKET ASSEMBLY.

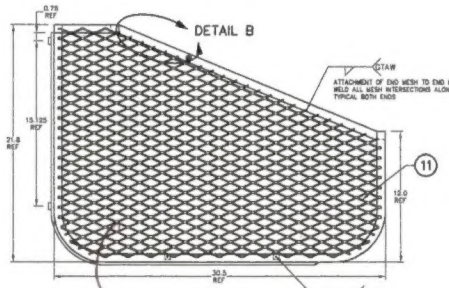
14099 ~~14008~~ 3/4 x 0.035



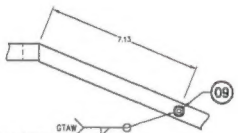
OUTBOARD SIDE VIEW
MESH NOT SHOWN FOR CLARITY

01 BASKET BODY ASSEMBLY

1/2" x 0.035
14099

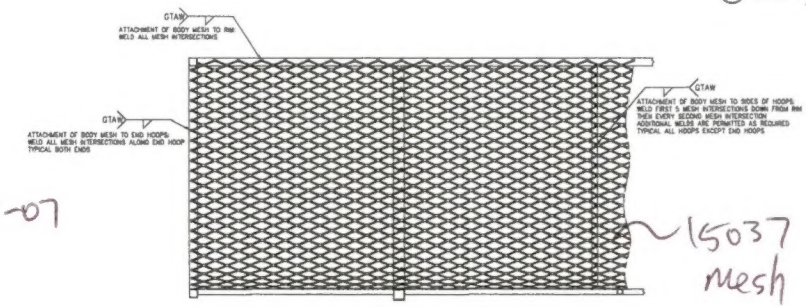


15037 END VIEW
ENDS OPPOSITE



2015-07

DETAIL B
SCALE 1:2
TYPICAL, BOTH ENDS



15037 Mesh

SECTION A-A
SCALE 1:4
VIEW LOOKING OUTBOARD

QTY	PART NO.	ITEM	DESCRIPTION	MATERIAL	MATERIAL SPEC	STOCK SIZE
			LIST OF MATERIALS			
D1	100611-01	01	BASKET BODY ASSEMBLY			
A/R	---	03	TUBE	4130 STEEL, COND. N	MIL-T-6736	0.5 X 0.035 SQR. TUBE
A/R	---	03	TUBE	4130 STEEL, COND. N	MIL-T-6736	0.75 X 0.035 SQR. TUBE
1	100621-01	04	LH END HOOP			
1	100621-02	05	RH END HOOP			
2	100622-01	06	ATTACHMENT HOOP			
1	100620-01	07	HOOP			
2	100620-02	08	HOOP - WITH HANDLE PROV			
2	46215-01	09	BUSHING			
2	100611-10	10	CAP	MILD STEEL	ASTM 1010/1020	0.050 SHEET
A/R	3/4-16F	11	MESH	MILD STEEL	COMMERCIAL	
1	84282-01	12	BASKET HANDLE PROVISIONS ASSEMBLY			

APPROVALS		DATE
DRAWN	JEFF CLARKE	26 NOV 2014
CHECKED	JASON REEVE	27 NOV 2014

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON:
DECIMALS: X.XXX ±0.010, X.XX ±0.03, X.X ±0.1
ANGLES: ±1/2°

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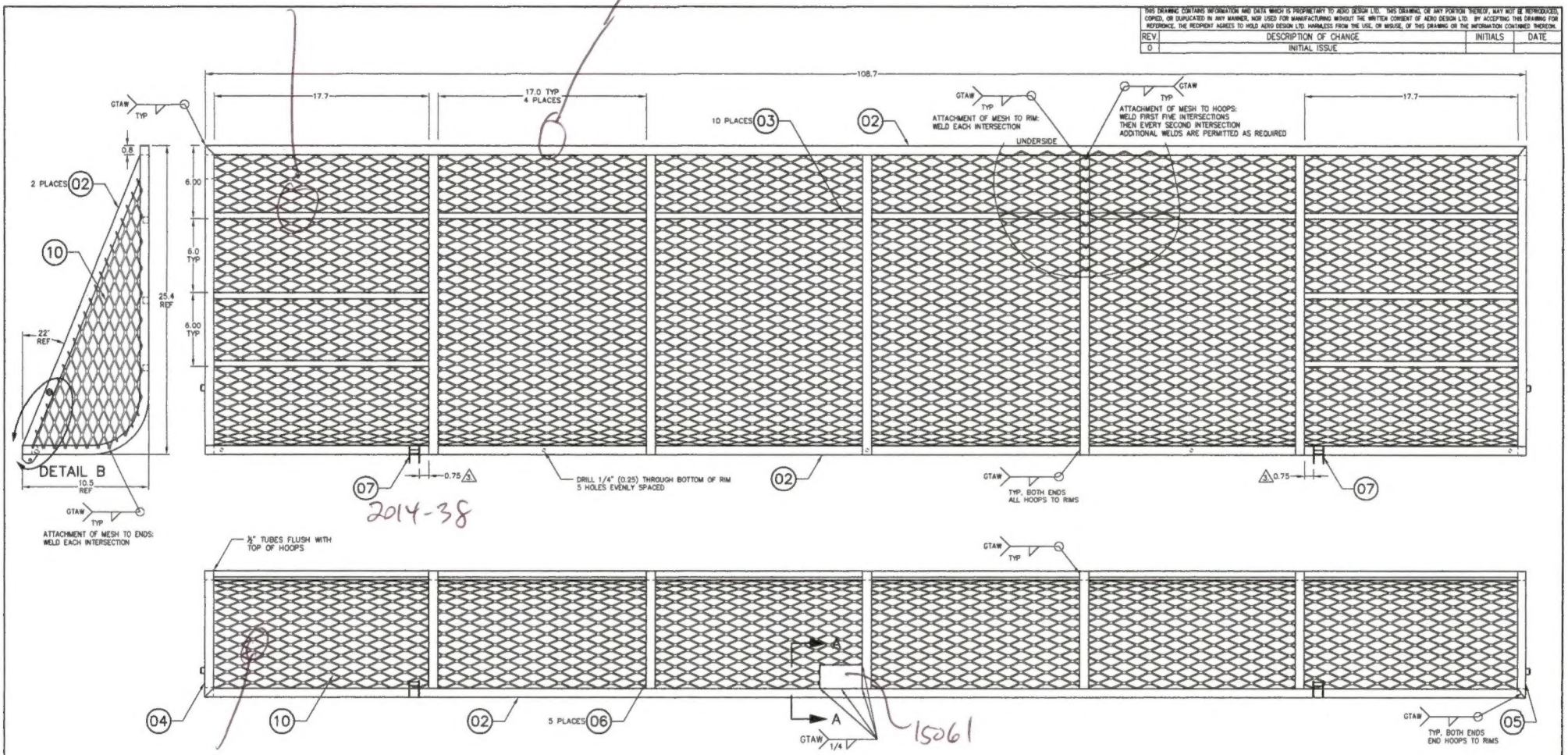
BELL 205, 212, 214, 412 SERIES
QUICK RELEASE MEGA CARGO BASKET
BASKET BODY ASSEMBLY

SCALE	SHEET SIZE	DWG. NO.	REV.
1 : 4	A0	100611	0
SHEET 1 OF 1			

1/2 x 0.035 - 14099

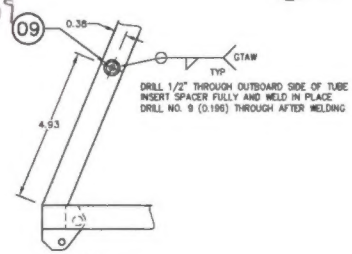
3/4 x 0.035 - ~~14099~~ 14099 JC.

REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE		



01 LID ASSEMBLY

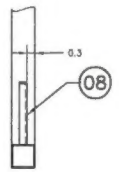
2014-09



DETAIL B

SCALE 1:2

TYPICAL, BOTH ENDS



SECTION A–A

SCALE 1:2

NOTES:

1. REMOVE ALL BURRS AND BREAK SHARP EDGES.
2. WELDING OF 4130 STEEL TO BE COMPLETED BY GTAW METHOD TO AMS 2685C.
   4130 AND 1018 STEEL: WELDING ROD SHALL CONFORM TO ER70S-2 OR EQUIVALENT.
   STAINLESS AND 4130 STEEL: WELDING ROD SHALL CONFORM TO ER308L OR EQUIVALENT.
3. INSTALL ITEM 5 (LID HANDLE PROVISIONS ASSEMBLY) IN ACCORDANCE WITH AERO DESIGN LTD. DRAWING 84263, LOCATED AS SHOWN.
4. DRILL #30 (0.129) HOLES IN LONG TUBE MEMBERS AT HOOP LOCATIONS TO VENT WELD GASSES. WHEN ASSEMBLY IS COMPLETE, FILL ALL EXPOSED VENT HOLES WITH ROSETTE WELD.
5. FINISH: THOROUGHLY CLEAN AND POWDER COAT LID ASSEMBLY.

QTY	PART NO.	ITEM	DESCRIPTION	MATERIAL	MATERIAL SPEC	STOCK SIZE
1	3/4-16F	10	MESH	MILD STEEL	COMMERCIAL	
2	49218-01	09	BUSHING			
1	36210-04	08	PLACARD BRACKET			
1	84263-01	07	LID HANDLE PROVISIONS ASSEMBLY			
5	100624-01	06	HOOP			
1	100623-02	05	RH LID END HOOP			
1	100623-01	04	LH LID END HOOP			
A/R	--	03	TUBE	4130 STEEL, COND. N	MIL-T-6736	0.5 X 0.035 SQR. TUBE
A/R	--	02	TUBE	4130 STEEL, COND. N	MIL-T-6736	0.75 X 0.035 SQR. TUBE
1	100612-01	01	BASKET LID ASSEMBLY (STANDARD)			

LIST OF MATERIALS

APPROVALS		DATE
DRAWN:	JEFF CLARKE	22 DEC 2014
CHECKED:	JASON REKVE	22 DEC 2014

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
TOLERANCES ON:
DECIMALS: X.XXX ±0.010; X.XX ±0.03; X.X ±0.1
ANGLES: ±1/2°

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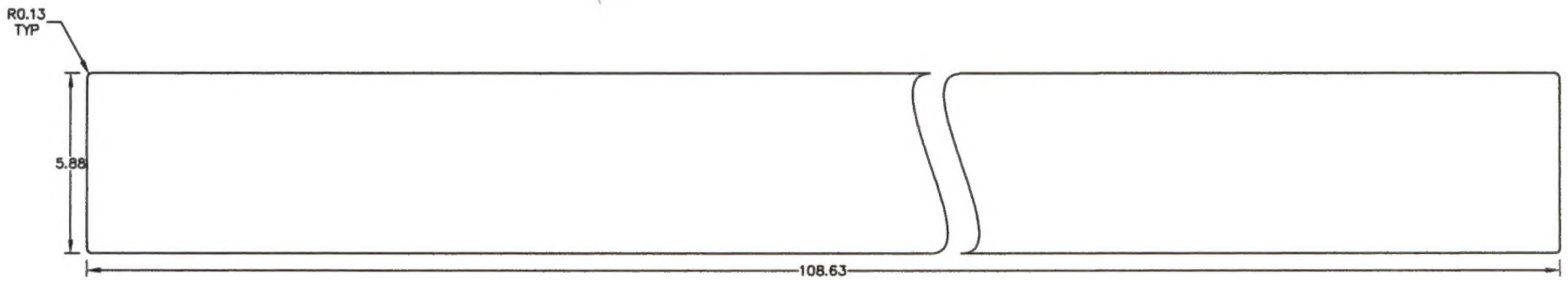
QUICK RELEASE MEGA CARGO BASKET
STANDARD LID ASSEMBLY

SCALE	DWG. SIZE	DWG. NO.	REV.
1 : 4	A1	100612	0
SHEET 1 OF 1			

REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE		

14092



(01) FILLER SHEET

NOTES

1. REMOVE ALL BURRS AND BREAK SHARP EDGES.
2. THOROUGHLY DEGREASE, ALODINE, EPOXY PRIME AND POLYURETHANE PAINT ALL ALUMINUM PARTS PRIOR TO ASSEMBLY.
   ALTERNATE: THOROUGHLY DEGREASE AND POWDER COAT ALL ALUMINUM PARTS PRIOR TO ASSEMBLY.

QTY	PART NO.	ITEM	DESCRIPTION	MATERIAL	MATERIAL SPEC	STOCK SIZE
	LIST OF MATERIALS					
1	100616-01	01	FILLER SHEET	6061-T6 ALUMINUM	QQ-A-250/11	0.050" SHEET

APPROVALS		DATE
DRAWN:	JEFF CLARKE	26 NOV 2014
CHECKED:	JASON REKVE	27 NOV 2014

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
TOLERANCES ON:

DECIMALS		ANGLES
X.XXX	±0.010	±1/2°
X.XX	±0.03	
X.X	±0.1	

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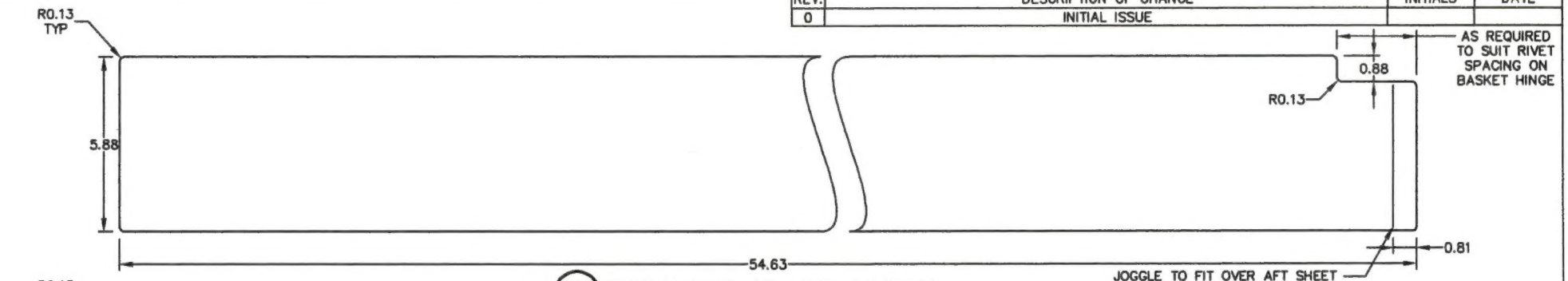
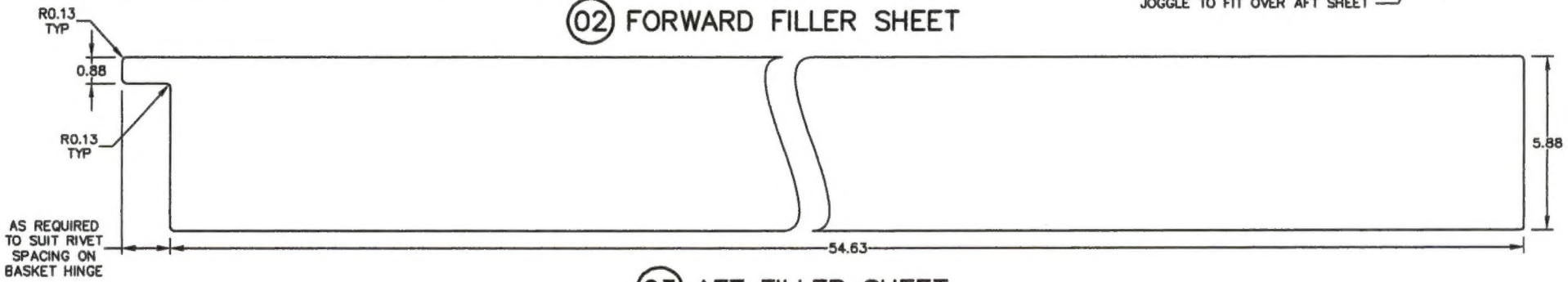
BELL 205, 212, 214, 412 SERIES
QUICK RELEASE MEGA CARGO BASKET
FILLER SHEET

SCALE 1 : 4	DWG. SIZE	DWG. NO.	REV.
SHEET 1 OF 2	LGL	100616	0

REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE		



(02) FORWARD FILLER SHEET



(03) AFT FILLER SHEET

QTY	PART NO.	ITEM	DESCRIPTION	MATERIAL	MATERIAL SPEC	STOCK SIZE
	LIST OF MATERIALS					
1	100616-03	03	AFT FILLER SHEET	6061-T6 ALUMINUM	QQ-A-250/11	0.050" SHEET
1	100616-02	02	FORWARD FILLER SHEET	6061-T6 ALUMINUM	QQ-A-250/11	0.050" SHEET

NOTES

1. REMOVE ALL BURRS AND BREAK SHARP EDGES.
2. THOROUGHLY DEGREASE, ALODINE, EPOXY PRIME AND POLYURETHANE PAINT ALL ALUMINUM PARTS PRIOR TO ASSEMBLY.
   ALTERNATE: THOROUGHLY DEGREASE AND POWDER COAT ALL ALUMINUM PARTS PRIOR TO ASSEMBLY.

APPROVALS		DATE
DRAWN:	JEFF CLARKE	26 NOV 2014
CHECKED:	JASON REKVE	27 NOV 2014

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
TOLERANCES ON:

DECIMALS		ANGLES
X.XXX	±0.010	±1/2°
X.XX	±0.03	
X.X	±0.1	

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BELL 205, 212, 214, 412 SERIES QUICK RELEASE MEGA CARGO BASKET FILLER SHEET

SCALE 1 : 4	DWG. SIZE	DWG. NO.	REV.
SHEET 2 OF 2	LGL	100616	0

REV	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE		

01 HOOP

02 HOOP – WITH HANDLE PROVISIONS

NOTES

1. REMOVE ALL BURRS AND BREAK SHARP EDGES.
2. WELDING OF 4130 STEEL TO BE COMPLETED BY GTAW METHOD TO AWS2985C. WELDING ROD SHALL CONFORM TO AMS ER70S-2 OR EQUIVALENT.
3. BASKET HANDLE PROVISIONS TO BE INSTALLED IN ACCORDANCE WITH AERO DESIGN DRAWING 84282. DIMENSIONS AND PARTS SHOWN ARE FOR REFERENCE ONLY.

ITEM	PART NO.	DESCRIPTION	MATERIAL	MATERIAL SPEC	STOCK SIZE	QTY	QTY	QTY
2	84272-01	04 BUSHING	4130 STEEL COND. N	MIL-T-6736	0.313 X 0.058 WALL TUBE			
1	84282-01	03 BASKET HANDLE PROVISIONS ASSEMBLY						
	100620-02	02 HOOP – WITH HANDLE PROV.	4130 STEEL COND. N	MIL-T-6736	0.5 X 0.035 SQR TUBE			
	100620-01	01 HOOP	4130 STEEL COND. N	MIL-T-6736	0.5 X 0.035 SQR TUBE			

LIST OF MATERIALS

APPROVALS		DATE
DRAWN	JEFF CLARKE	26 NOV 2014
CHECKED	JASON REKVE	27 NOV 2014

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON:

DECIMALS	ANGLES
X.XXX ±0.010	±1/2°
X.XX ±0.03	
X.X ±0.1	

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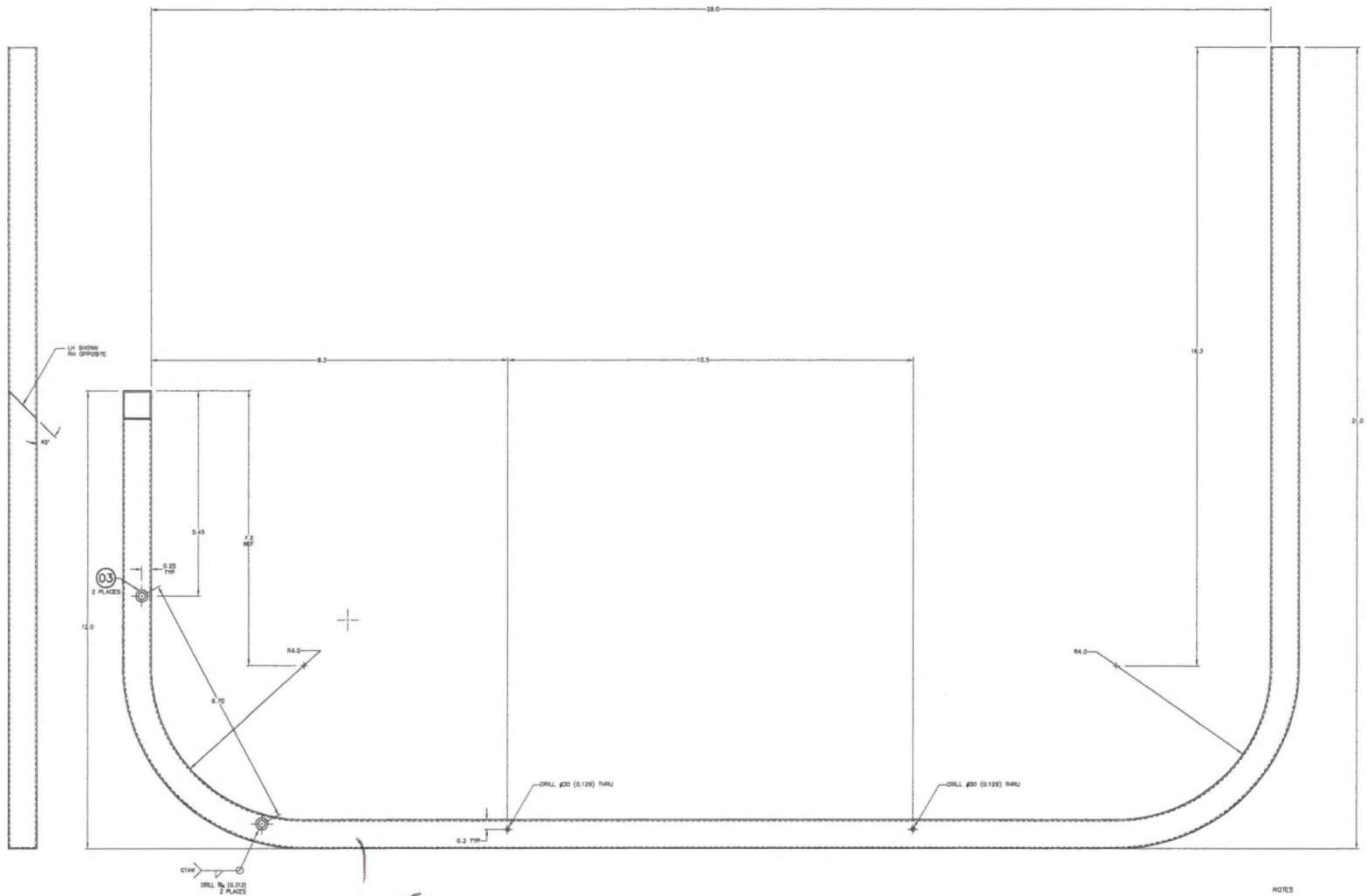
BELL 205, 212, 214, 412 SERIES
QUICK RELEASE MEGA CARGO BASKET
HOOP

SCALE 1 : 1	DWG. SIZE	DWG. NO.	REV.
SHEET 1 OF 1	A0	100620	0

REV	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE		



~~14004~~ 14099 gc.

01 LH END HOOP
02 RH END HOOP
LH SHOWN, RH OPPOSITE

03 BUSHING

15024

ER70S-2 14033

NOTES

1. REMOVE ALL BURRS AND BREAK SHARP EDGES.
2. WELDING OF 304 STAINLESS STEEL TO BE COMPLETED BY GTAW METHOD TO AWS2.9/2.9M. WELDING ROD SHALL CONFORM TO ER70S-2 OR EQUIVALENT.

QTY	ITEM	PART NO.	DESCRIPTION	MATERIAL	MATERIAL SPEC	STOCK SIZE
2	03	100621-03	BUSHING	4130 STEEL COND. N	MIL-T-6736	0.313 X 0.058 WALL TUBE
2	02	100621-02	RH END HOOP	4130 STEEL COND. N	MIL-T-6736	0.75 X 0.035 SQR TUBE
1	01	100621-01	LH END HOOP	4130 STEEL COND. N	MIL-T-6736	0.75 X 0.035 SQR TUBE

LIST OF MATERIALS

APPROVALS		DATE
DRAWN:	JEFF CLARKE	26 NOV 2014
CHECKED:	JASON REKVE	27 NOV 2014

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON:
DECIMALS X.XXX ±0.010, X.XX ±0.03, X.X ±0.1
ANGLES ±1/2°

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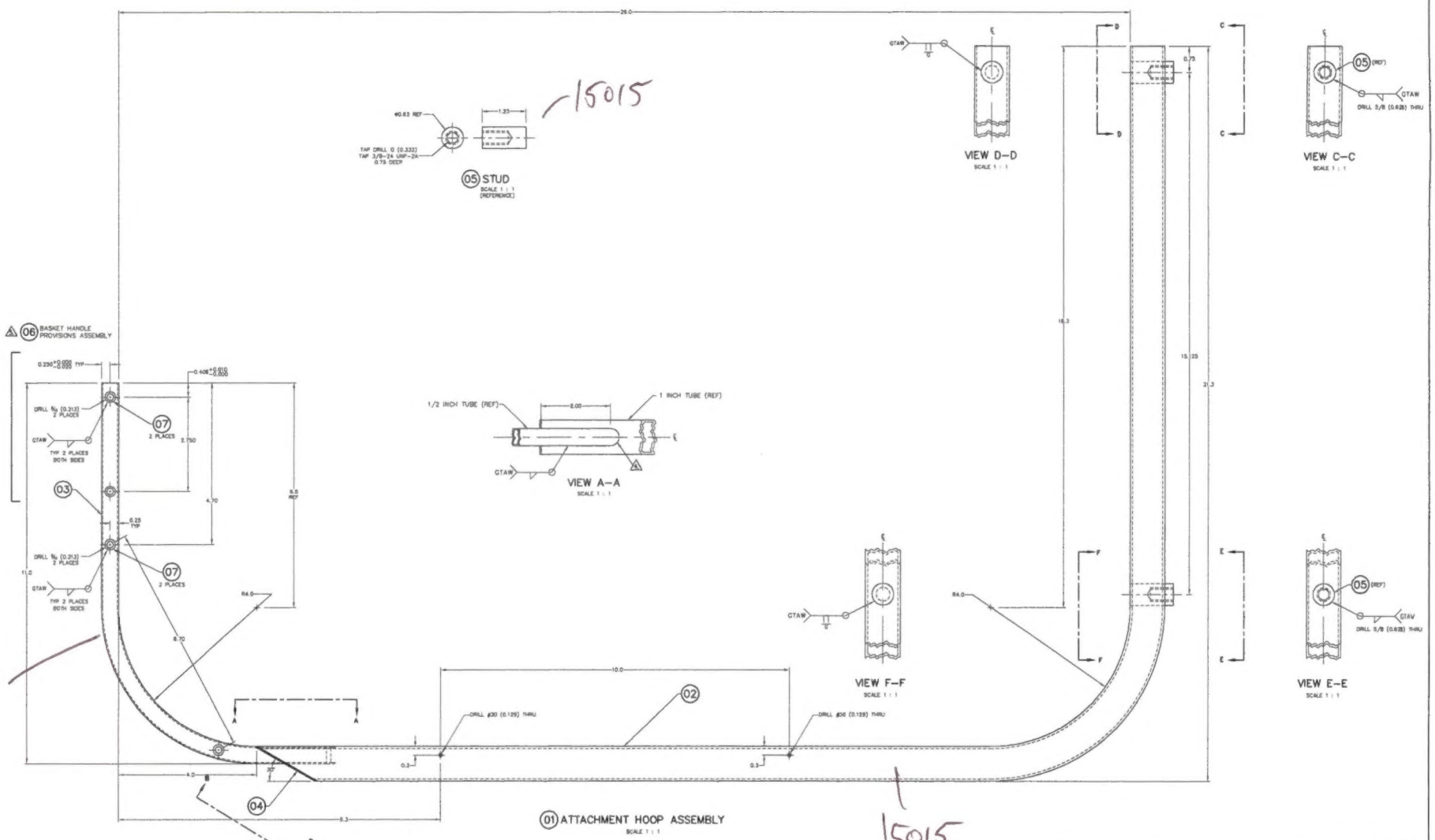
BELL 205, 212, 214, 412 SERIES
QUICK RELEASE MEGA CARGO BASKET
END HOOP

SCALE 1 : 1	DWG. SIZE	DWG. NO.	REV.
SHEET 1 OF 1	A0	100621	0

REV	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE		



NOTES

1. REMOVE ALL BURRS AND BREAK SHARP EDGES.
2. WELDING OF 4130 STEEL TO BE COMPLETED BY GTAW METHOD TO AMS2685C. WELDING ROD SHALL CONFORM TO AMS 5770S-2 OR EQUIVALENT.

⚠1 MILL SLOT INTO 1" TUBE AS SHOWN. CENTER END OF 1/2" TUBE TO MINIMIZE GAP BETWEEN 1" TUBE AND ITEM 1/2" TUBE.

⚠2 ADJUST SLOT OF CAP (76433-04) TO FIT AS REQUIRED.

⚠3 BASKET HANDLE PROVISIONS ARE INSTALLED IN ACCORDANCE WITH AERO DESIGN DRAWING 84262. DIMENSIONS AND PARTS SHOWN ARE FOR REFERENCE ONLY.

QTY	ITEM	PART NO.	DESCRIPTION	MATERIAL	MATERIAL SPEC	STOCK SIZE
			LIST OF MATERIALS			
2	07	84272-01	BUSHING	4130 STEEL, COND. N	MIL-T-6736	0.313 X 0.058 WALL TUBE
1	06	84262-01	BASKET HANDLE PROVISIONS			
2	05	80621-05	STUD	MILD STEEL	AISI 1010/1020	ø0.63 ROD
1	04	76423-04	CAP			
A/R	03	100622-03	TUBE - 1/2 IN	4130 STEEL, COND. N	MIL-T-6736	0.5 X 0.035 SQR TUBE
A/R	02	100622-02	TUBE - 1 IN	4130 STEEL, COND. N	MIL-T-6736	1 X 0.065 SQR TUBE
1	01	100622-01	ATTACHMENT HOOP ASSEMBLY			

APPROVALS		DATE
DRAWN	JEFF CLARKE	26 NOV 2014
CHECKED	JASON REKVE	27 NOV 2014

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON:
DECIMALS X.XXX ±0.010, X.XX ±0.03, X.X ±0.1
ANGLES ±1/2°

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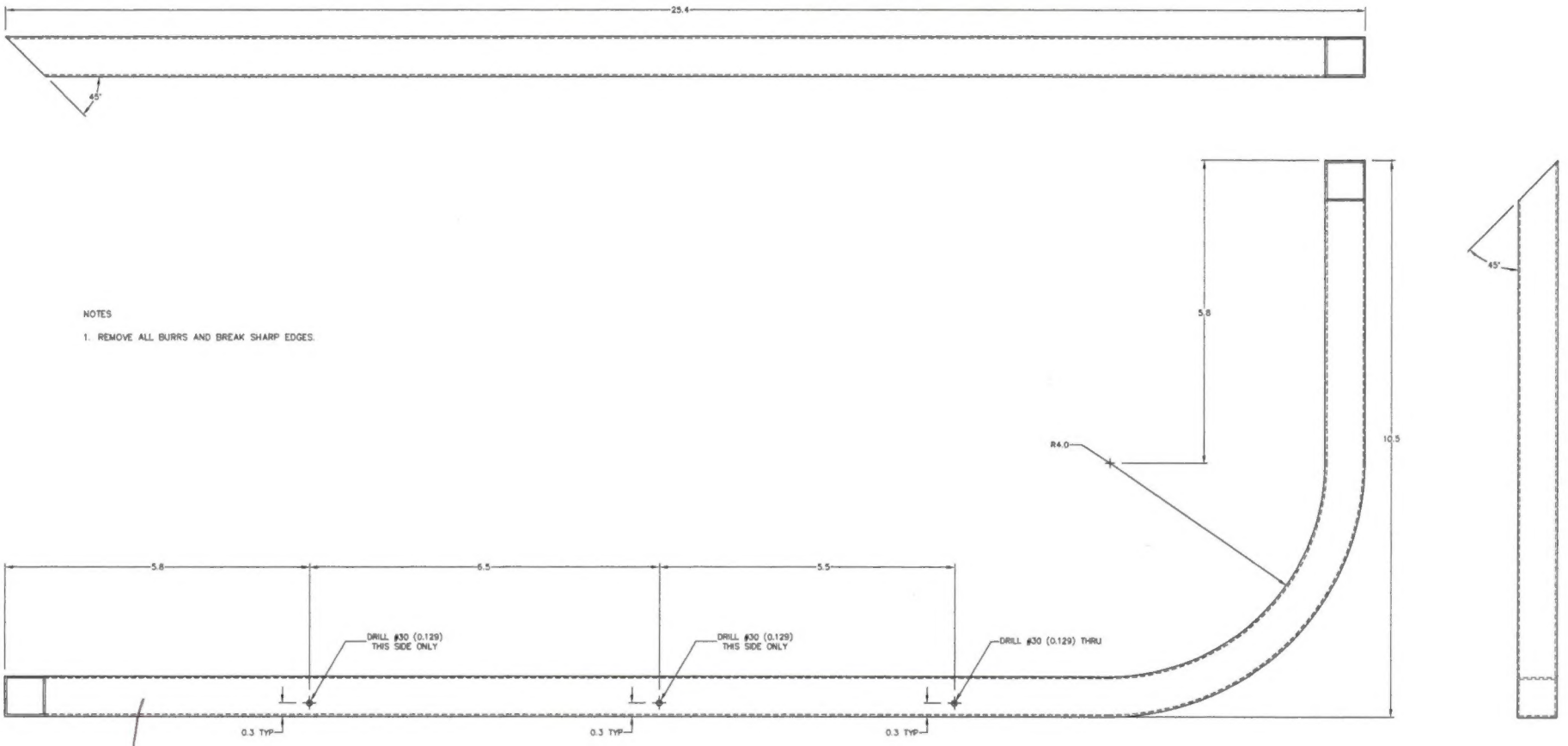
BELL 205, 212, 214, 412 SERIES
QUICK RELEASE MEGA CARGO BASKET
ATTACHMENT HOOP ASSEMBLY

SCALE	DWG SIZE	DWG NO.	REV
1 : 1	A0	100622	0
SHEET 1 OF 1			

REV	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE		



NOTES

1. REMOVE ALL BURRS AND BREAK SHARP EDGES.

14009

(01) LH LID END HOOP
(02) RH LID END HOOP

LH SHOWN, RH OPPOSITE

QTY	ITEM	PART NO.	DESCRIPTION	MATERIAL	MATERIAL SPEC	STOCK SIZE
02	02	100623-02	RH LID END HOOP	4130 STEEL COND. N	MIL-T-6736	0.75 X 0.035 SQR TUBE
01	01	100623-01	LH LID END HOOP	4130 STEEL COND. N	MIL-T-6736	0.75 X 0.035 SQR TUBE

LIST OF MATERIALS

APPROVALS		DATE
DRAWN:	JEFF CLARKE	26 NOV 2014
CHECKED:	JASON REKVE	27 NOV 2014

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
TOLERANCES ON:
DECIMALS: X.XXX ±0.010; X.XX ±0.03; X.X ±0.1
ANGLES: ±1/2°

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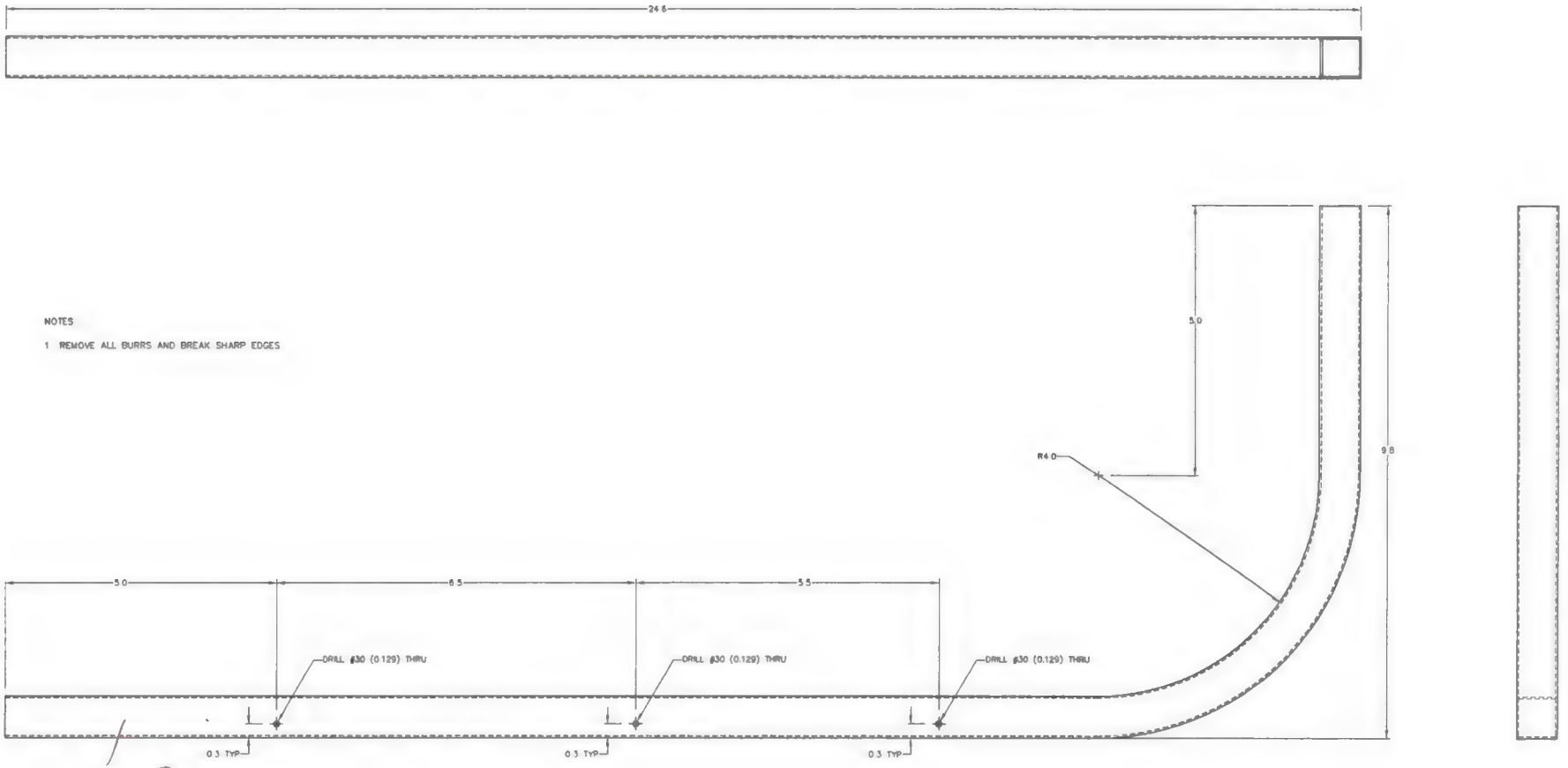
BELL 205, 212, 214, 412 SERIES
QUICK RELEASE MEGA CARGO BASKET
STANDARD LID END HOOP

SCALE	DWG. SIZE	DWG. NO.	REV.
1 : 1	A1	100623	0
SHEET 1 OF 1			

REV	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE		



NOTES

1 REMOVE ALL BURRS AND BREAK SHARP EDGES

14009

(01) LH END HOOP

	100624-01	01	LID HOOP	4130 STEEL COND N	MIL-T-6736	0.75 X 0.035 SQR TUBE
01	PART NO.	ITEM	DESCRIPTION	MATERIAL	MATERIAL SPEC	STOCK SIZE
QTY	LIST OF MATERIALS					

APPROVALS		DATE
DRAWN	JEFF CLARKE	26 NOV 2014
CHECKED	JASON REKVE	27 NOV 2014

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON.

DECIMALS	ANGLES
X.XXX ±0.010	±1/2°
X.XX ±0.03	
X.X ±0.1	

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BELL 205, 212, 214, 412 SERIES
QUICK RELEASE MEGA CARGO BASKET
STANDARD LID HOOP

SCALE 1 : 1	DWG. SIZE	DWG. NO	REV
SHEET 1 OF 1	A1	100624	0

CARGO BASKET LID FABRICATION - COMMON

212 MEGA

General

These instructions apply to all cargo basket lid assemblies. Refer to the following drawings, at the current revision, for dimensions and details:

Bell 206L/407 – Right side only
69812, Revision 3 – Standard Low Mounted Basket; Extra-Wide Low Mounted Basket
94612, Revision 0 – Extra-Wide Low Mounted Ski Basket
76612, Revision 0 – High Mounted Ski Basket

Eurocopter AS350/AS355 – left or right
77612, Revision 1 – Short Basket
69812, Revision 3 – Medium Basket (left and right)
78412, Revision 2 – Long Basket
94012, Revision 0 – Extra Large (ski) Basket

Robinson R44 – left or right
90612, Revision 0 – Standard Basket (left or right)

Bell 206B – right side only
80212, Revision 0 – Short Basket
80312, Revision 0 – Medium Basket
81112, Revision 0 – Long Basket

Bell 429 – right or left
95912, Revision 0 – Standard Basket

Bell Medium – left or right
75112, Revision 0 – Standard Basket
95512, Revision 0 – Extra Large (ski) Basket

MD600
82812, Revision 0 – Standard Basket

Options
70405, Revision 3 – Walkway
70402, Revision 1 – Lid Door

CARGO BASKET LID FABRICATION

Complete (initial or SCA #)

Work Order: 2015-124

Date Open: 26 Nov 2015

1. Rim Assembly – Basket Lid — AO 73-04 02
    a. Cut and fit ¾" x 0.035 material to fit rim jig, 45 degree ends.
        i. 1 or 2 lid prop bushing holes in short tube – refer to drawing
    b. Record material PO on attached material list.
    c. Remove writing on tubes with acetone and scotch bright. — AO 73-04 05
2. Weld Rim Assembly
    a. Record welding rod PO on attached material list. — AO 73-04 02
3. Inspection
    a. Rim for complete welds — AO 73-04 02
4. Frame assembly – Lid
    a. General
        i. Vent holes shall be #30 (0.129), and located inside the structure wherever possible to allow venting of weld gasses through existing holes (i.e. lid prop bushing)
    b. Insert rim from step 2 into jig.
    c. Cut and fit ¾" x 0.035 material, 21" long, for lid cross members.
    d. Record material PO on attached material list.
    e. Remove writing on tubes with acetone and scotch bright.
    f. Drill vent holes into rim to vent cross members into rim.
    g. Locate cross members in lid rim. Refer to drawing for spacing of cross members. Clamp cross members with C-clamps to jig. — AO 73-04 02
5. Frame assembly – Lid with optional walkway modification
    a. Fit cross members to rim in accordance with step 4.
    b. Attach walkway jig with C-clamps. Ensure correct orientation of rim, refer to drawing.
    c. Cut ½" x 0.035 material for walkway stringers to fit between lid cross members. Record material PO on attached material list.
    d. Drill vent holes into cross members at walkway stingers.
    e. Align walkway stringers on walkway jig using cleco clamps near both ends of each stringer, and clamp stringer to jig using a C-clamp in the centre. — AO 73-04 05
6. Weld frame assembly.
    a. Record welding rod PO on attached material list.
    b. Jigs must remain in place for as long as practical during welding. — AO 73-04 02
7. Inspection
    a. Frame assembly for complete welds.

8. Mesh assembly. AD 73-04 02
   Note: 95912 (Bell 429) does not have mesh. Skip to step 10.
   a. Pull sheet of expanded mesh from stock. Record material PO on attached material list.
   b. Cut mesh to size for lid.
   c. Remove surface rust with scotch-brite.
   d. Ensure lid is prepared for mesh on the correct side.

9. Weld mesh to frame assembly per drawing. AD 73-04 05
   a. General welding requirements for all lids:
      i. Every intersection on all edges.
      ii. First 5 intersections along cross members, then every second intersection.
   b. MIG weld both short sides.
   c. Clamp lid over spacer at centre of lid to pre-tension mesh.
      i. ¾" for lids under 76"
      ii. 1" (check) for lids over 76"
   d. Weld remainder of mesh as indicated in a.
   e. Record welding rod PO on attached material list.

10. Weld lid components. AD 73-04 05
    a. Handle brackets, locate in accordance with drawing.
       i. Standard location: ¼" outside of last cross member on both ends.
       ii. Record handle bracket WO and welding rod PO on attached material list.
    b. Lid prop bushing(s).
       i. one or two in accordance with drawing.
       ii. Record lip prop bushing WO and welding rod PO on attached material list.
    c. Placard bracket. – not installed on 95912 (Bell 429)
       i. Locate on cross member to set bracket in centre bay of lid.
       ii. Record placard bracket WO and welding rod PO on attached material list.

11. Clean up AD 73-04 02
    a. Grind high spots off mesh welds.
    b. Tighten mesh using special pliers. Tighten enough to remove "oil canning", where mesh springs in or out.
    c. Straighten lid using frame attached under welding table. Work carefully, avoid excessive force to prevent kinking rim tubes.
    d. Drill #9 through lid prop bushing(s). De-burr hole(s).
    e. Drill for lid bumpers using 1/4" (#3) centre drill.
       i. 3 places for lids under 76"
       ii. 4 places for lids over 76"
    f. Remove surface rust with scotch-brite pad.

12. Final Inspection AD 73-04 01
    To be completed by a different person than the previous steps.
    a. Basket lid assembly for complete welds, and required minimum mesh weld locations.
    b. Material lists complete.
    c. Overall condition and conformity to drawing(s).

13. Powder Coating
    a. Parts are to be powder coated white in accordance with commercial practices. AO 73-04 02
    b. Record powder coating PO.
    c. Inspect powder coating on receiving.
    d. Tag lid assembly and place into stock in preparation for assembly.

CARGO BASKET BODY FABRICATION - COMMON 212 MEGA

General

These instructions apply to all cargo basket body assemblies. Refer to the following drawings, at the current revision, for dimensions and details:

Bell 206L/407 – Right side only
69811, Revision 3 – Standard Low Mounted Basket
94511, Revision 0 – Extra-Wide Low Mounted Basket
94611, Revision 0 – Extra-Wide Low Mounted Ski Basket
76611, Revision 0 – High Mounted Ski Basket
Options 70404, Revision 2 – Front end cutout – 698
70411, Revision 0 – Front end cutout – 945/946

Eurocopter AS350/AS355 – left or right
77611, Revision 1 – Short Basket
76411, Revision 3 – Medium Basket (left or right)
78411, Revision 2 – Long Basket
94011, Revision 0 – Extra Large (ski) Basket
Options 70406, Revision 2 – Front end cutout – 764/776/784/940

Robinson R44 – left or right
90611, Revision 0 – Standard Basket (left or right)

Bell 206B – right side only
80211, Revision 0 – Short Basket
80311, Revision 0 – Medium Basket
81111, Revision 0 – Long Basket
Options 70406, Revision 2 – Front end cutout – 802/803/811

Bell 429 – right or left
95911, Revision 0 – Standard Basket

Bell Medium – left or right
75111, Revision 0 – Standard Basket
95511, Revision 0 – Extra Large (ski) Basket
Options 70407, Revision 1 – Front end cutout – 751
704 , Revision – Front end cutout – 955

MD600
82811, Revision 0 – Standard Basket

Options – Applicable to all models
70403, Revision 5 – Auxiliary Latch

CARGO BASKET BODY FABRICATION - COMMON

Complete (initial or SCA #)

Work Order: 2015-124

Date Open: 26 Nov 2015

1. Rim Assembly – Basket Body — AD 73-04 02
    a. Cut and fit ¾" x 0.035 material to fit rim jig.
        i. 1 or 2 lid prop bushing holes in short tube – refer to drawing
    b. Record material PO on attached material list.
    c. Remove writing on tubes with acetone and scotch bright.
    d. For extra large baskets – drill #30 (0.129) vent holes to vent stringer tubes into rims.
    e. *94611 (206L/407 XL ski) only* – drill for 4 threaded bushings before assembling rim. — AD 73-04 05

2. Weld Rim Assembly.
    a. Record welding rod PO on attached material list.
    b. *94611 (206L/407 XL ski) only* – weld 4 threaded bushings into inboard rim tube. — AD 73-04 02

3. Inspection
    a. Rim for complete welds — AD 73-04 02

4. Frame assembly – body
    a. General
        i. Vent holes shall be #30 (0.129), and located inside the structure wherever possible to allow venting of weld gasses through existing holes (i.e. lid prop bushing, hoops, etc.)
    b. Grind corner welds from step 2 on rim to allow hoops to sit flat.
    c. Pull required hoops from stock - standard, attachment, handle.
        i. If hoops are not in stock see detailed procedure sheet for specific hoop fabrication.
        ii. Ensure vent hole is located at centre of tube to vent spine tubes.
    d. Assemble hoops with attachment lug locating jig and hoop spacing jig.
        i. Ensure correct order and orientation of hoops. Refer to drawing.
            1. Attachment lugs are on inboard side.
            2. Handle bracket bushings are on outboard side, second hoop from both ends. May be on attachment hoops.
        ii. Run 3/8-24 tap into attachment lugs to ensure clear threads.
        iii. Bolt attachment lug locating jig to attachment hoops with 3/8-24 bolts.
        iv. Attach inboard and outboard hoop spacing jigs to all hoops using 1" C-clamps. Raise jigs approximately 2" off table to allow room to weld around hoops.
        v. Attach bottom (spine) jig to all hoops using 1" C-clamps along the centre line of the basket. Ensure jig is straight prior to tightening all clamps.
    e. Cut ½" x 0.035 material to fit spine jig.
    f. Cut ½" x 0.035 material for strut to fit from lower inboard attachment to upper outboard rim.
        i. Refer to applicable drawing for position, not required on some baskets.
    g. *Option*: Cut ½" x 0.035 material for front end cutout. Record material PO on attached material list.
    h. *90611 (R44) only*: Cut ½" x 0.035 material to fit front end structure. Record material PO on attached material list.
    i. Drill vent holes into attachment hoop and/or rim to vent strut(s) and front end cutout.

j. Record hoop WOs and material POs on attached material list.
k. Remove writing on tubes with acetone and scotch bright.
l. Insert rim assembly into jig and set frame assembly onto rim. Ensure correct orientation of lid prop bushings in rim to frame. Bushing hole must be closer to attachment side.
m. Align hoops to rim in accordance with drawing. General positions:
    i. Extra large baskets
        1. inboard side of hoops (attachment side) aligns to OUTSIDE of rim
        2. outboard side of hoops (handle side) aligns to INSIDE of rim
        3. forward and aft hoops align to INSIDE of rim
    ii. All other baskets
        1. inboard side of hoops (attachment side) aligns to INSIDE of rim
        2. outboard side of hoops (handle side) aligns to INSIDE of rim
        3. forward and aft hoops align to INSIDE of rim, except R44

AD 73-04 05

5. TIG weld frame to rim assembly.
    a. Ensure lug locating jig and hoop locating jigs are in place. Jigs must remain in place for as long as practical during welding.
    b. Strut tubes and front end cutout (see step 4.f. and g.) must be welded in place after the hoops are welded to the rim. Jig(s) must be in place prior to welding strut tubes.
    c. Robinson R44 (90611) requires fitting and welding of forward end after remainder of basket frame is welded. Use jig to support front hoop.
    d. Record welding rod PO on attached material list.

AD 73-04 02

6. Inspection
    a. Frame assembly for complete welds.

AD 73-04 02

7. Mesh assembly.
    a. Pull sheet of expanded mesh from stock. Record material PO on attached material list.
    b. Cut mesh to size for body.
    c. Remove surface rust with scotch-brite.
    d. Bend body mesh – use table with bend markings on top. Lock wheels on table.
        i. For extra wide baskets only –
            1. Set ¾" angle along edge of table under mesh sheet. Set 1.5" square tube on top of mesh aligned with angle on edge of table. Clamp in place with 6" C-clamps.
            2. Bend upper edge of sheet just past a cell intersection to make a flange 2.5" - 3.25" wide. Closer to 2.5" is preferred, full cell intersection on flange side at bend is required.
            3. Bend down by hand as far as possible, then use a hammer to flatten the bend tight against the angle on the edge of the table.
        ii. Using markings on table, align sheet to indicated edge.
        iii. Using markings on table, align 3" tube to required position and clamp tube in place.
        iv. Bend mesh by hand tightly over tube along length of tube.
        v. Keeping mesh in place, un-clamp 3" tube, move to other position and clamp tube in place.
        vi. Bend mesh by hand tightly over tube along length of tube.
    e. Install attachment lug jig onto basket frame.

f. Ensure end struts are welded in basket frame if required by the drawing.
g. Insert mesh into basket.
    i. General
        1. Some cells may interfere with correct positioning, especially at the upper corners and around struts. Bend cell(s) in as required, do not cut cells off.
        2. Ideally welds will be located on mesh intersections. Shift mesh if possible to minimize welds located off mesh intersections.
        3. Ensure mesh reaches all edges of basket BEFORE trimming. Regardless of progress in clamping, remove clamps and shift mesh if required.
        4. Ensure cleco clamps are placed from the inside of the basket to allow removal during welding. Cleco clamps may be used from the outside during fitting, but must be removed prior to welding.
    ii. Extra large baskets only – seat corner of mesh with flange into inboard upper corner of frame. Use C-clamps on edge of flange as required to maintain tight fit.
    iii. Starting at inboard top edge of basket, clamp mesh to hoop near top rim using cleco clamps onto hoops. For regular size baskets, edge of mesh should sit approximately half way up rim tube.
    iv. Working down the inboard side, clamp mesh to hoops with cleco clamps. Clamp down into radius of hoop and continue clamping as required to maintain tight fit in corner of hoop. After the corners are tight, two clamps just onto the radius on both ends should be sufficient to hold the corner tight, remove all extra clamps.
    v. Clamp mesh to spine in at least 1 place per section.
    vi. Working up the outboard side, clamp the mesh into the radius of hoop and continue clamping as required to maintain tight fit in corner of hoop. After the corners are tight, 2 clamps just onto the radius on both ends should be sufficient to hold the corner tight, remove all extra clamps.
    vii. Trim upper outboard edge of mesh if required, edge of mesh must be low enough on rim tube to prevent the weld from protruding above the edge of the rim. Some sheets are tapered and may require ½ to 1 cell to be removed over some or all of the length of the basket. De-burr cut edges with a sanding disc on a die-grinder. Straighten cut cells with duck-bill pliers. Clamp mesh near upper edge to hoops with cleco clamps after trimming.
    viii. Trim ends to land on hoops, at mesh intersections if possible.
h. Cut mesh to fit ends. Record material PO on attached material list.
    i. Remove surface rust with scotch-brite.
    ii. Ensure mesh is cut at intersections where possible.
    iii. Bend top edge of mesh 1/8"-3/16" down at 45 degrees
    iv. Cut for front end cutout if required.
i. 90611 (R44) only: Cut mesh to fit upper forward end. Record material PO on attached material list.
    i. Remove surface rust with scotch-brite.
    ii. Ensure mesh is cut at intersections where possible.
    iii. Bend top edge of mesh 1/4" down at 60 degrees.
    iv. Fit mesh to front end of basket.

8. Weld mesh to frame assembly per drawing. AD ~~73-04~~ 05
    a. Ensure lug locating jig is in place prior to welding.
    b. General welding requirements for all baskets, MIG welding:
        i. Every intersection at top edges.
        ii. Every intersection at ends.
        iii. First 5 intersections down on hoops, then every second intersection.
        iv. Every intersection along spine.
        v. Extra large baskets – every intersection along corner.
        vi. Every intersection around ends
        vii. Every intersection along struts (if applicable)
    c. Bend and trim cells bent in to fit mesh as required and weld in position.
    d. Grind high spots off body mesh welds on ends before welding end mesh.
    e. *90611 (R44) only* – weld lid prop bushing (step 9) into rim BEFORE welding upper mesh on forward end of basket assembly.
    f. Record welding rod PO on attached material list.

9. Weld basket components AD 73-04 05
    a. TIG weld lid prop bushing(s), one or two per drawing.
        i. Record welding rod PO on attached material list.
        ii. Record lip prop bushing WO on attached material list.
    b. TIG weld caps to close top of 1" hoops as applicable.
    c. 94611 (Bell206L/407 XL ski) only: cut rim over cross tube gap.
        i. Cut inboard rim on aft end. Grind flush with hoops.
        ii. TIG weld caps on open tubes.
        iii. Record cap material PO on attached material list.
    d. 95911 (Bell 429) only: placard bracket to forward upper corner of basket.
        i. Record welding rod PO on attached material list.
        ii. Record placard bracket WO on attached material list.

10. Clean up AD 73-04 02
    a. Grind high spots off mesh welds.
    b. Tighten mesh using special pliers. Tighten enough to remove "oil canning", where mesh springs in or out. Do not tighten in corners of hoops, mesh will be deformed.
    c. Drill #9 through lid prop bushing(s). De-burr hole(s).
    d. Remove surface rust with scotch-brite pad.

11. Final Inspection AD 73-04 01
    To be completed by a different person than the previous steps.
    a. Basket body assembly for complete welds, and required minimum mesh weld locations.
    b. Filled vent holes – usually on hoops
    c. Overall condition and conformity to drawing(s).
        i. Hoops for height.
        ii. Rim for width and length and alignment.
        iii. Lid prop lugs in correct ends.
        iv. Fore/aft strut in hoop if required by drawing.
    d. Material lists complete.

e. Tag complete basket body assembly in preparation for powder coating.

12. Powder Coating

AD 13-04 02

a. Parts are to be powder coated white in accordance with commercial practices.
b. Record powder coating PO.
c. Inspect powder coating on receiving.
d. Tag basket body assembly and place into stock in preparation for assembly.